

THE DER WEEKLY

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Distributed Energy Resources...the Power of Choice

● DOE News

CHP Integration Test Center at the UMCP

On January 30, 2002, six members of the British House of Parliament learned first-hand about the CHP Integration Project at the University of Maryland, College Park (UMCP). The CHP integration test center is funded by the Office of Distributed Energy Resources in the Office of Power Technologies. The Oak Ridge National Laboratory Project Manager provided technical details of the project, as well as coordinated the site visit. Discussions included DOE's CHP program activities and goals. Tony Colman, leader of the delegation, requested an ongoing dialogue on the topic of CHP. Visitors included: Tony Colman, MP (Labour), David Chaytor, MP (Labour), Malcolm Bruce, MP (Liberal Democrat), Simon Thomas, MP (Plaid Cymru), Timothy Loughton, MP (Conservative), and Gregory Barker, MP (Conservative). The delegation had been in the United States for a multi-lateral meeting for members of Congress and their counterparts from Canada, the United Kingdom, and the European Union. The meeting was coordinated by GLOBE USA, Global Legislators Organization for a Balanced Environment, a non-partisan educational association of senators and representatives from the United States Congress that promotes balanced and informed policy decisions to solve the world's most pressing environmental concerns. The meeting addressed issues of climate change, alternative energy, and emissions reductions.

BNL's Oil Fueled Microturbine Operational

The oilheat research program, part of the Office of Distributed Energy Resources, entered the microturbine power generation industry on February 6. A Capstone microturbine sales representatives visited Brookhaven National Laboratory (BNL) and commissioned the microturbine unit. The unit required an update of the control software which was downloaded via the on-board modem. The microturbine was purged of air and normal start-up followed, running at the rated output capacity of 28-30kW. BNL will now setup emissions equipment and proceed with performance measurements.

Absorption Chiller Arrives in Nevada

A triple-effect absorption chiller, developed under a cost-shared project with York International, has been delivered to the Clark County Government Center in Las Vegas, Nevada. The triple-effect chiller, which operates using a LiBr/water

absorption pair, has tested in the factory to be at least 30% more efficient than the current double-effect technology. The installation and field test is being managed by Oak Ridge National Laboratory, in coordination with the Nevada Test Site Development Corporation and York International. This triple-effect absorption technology was the recipient of an Energy 100 Award in 2001. The project is funded by the Office of Distributed Energy Resources in the Office of Power Technologies.

● Regional Office News

SRO to Participate in CHP Working Group

The Combined Heat and Power (CHP) Pacific Northwest Initiative meets for the first time in 2002 this February 12 at the Seattle Regional Office (SRO) in Seattle, Washington. Members of the team include Idaho National Engineering and Environmental Laboratory and Seattle Regional Office staff, Washington State University Energy Program, Oregon Office of Energy, Seattle City Light, Energy International, Inc., and the International District Energy Association. The agenda includes establishing goals and priorities for 2002, development of CHP education centers, and expanding the group to include other parties.

CRO & OH Dept. of Development Workshop

The Chicago Regional Office cosponsored the Ohio Department of Development workshop and exhibition, "On-site Energy Options for Ohio Businesses and Homeowners" at the Hyatt Regency Hotel in Columbus, Ohio, on February 4. Other cosponsors included the Public Utilities Commission of Ohio and the Ohio Environmental Protection Agency. The opening panel included Bruce Johnson, Director, Ohio Department of Development; Dr. Alan Schriber, Chairman, Public Utilities Commission of Ohio; and Christopher Jones, Director, Ohio Environmental Protection Agency. Peter Dreyfuss, Director of the Chicago Regional Office, presented a luncheon keynote speech. The one-day workshop provided homeowners and businesses with information on distributed generation options for their homes and establishments. More than 300 people attended the workshop and exhibition, including representatives from Green Energy Ohio, Bergey Wind Power,

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Distributed Power and Industrial Distributed Generation Program Peer Reviews



On January 29 and 30, the Distributed Power (DP) and Industrial Distributed Generation (IDG) Programs held their peer reviews in Arlington, Virginia. More than 200 experts from industry, State and Federal agencies, and public interest groups attended the meeting. The reviews were conducted by a distinguished panel in response to both a National Academy of Science recommendation under the Assistant

Secretary for Energy Efficiency and Renewable Energy, as well as a Department-wide effort to bring programs into alignment with the National Energy Policy. Dr. Robert K. Dixon, Deputy Assistant Secretary for the Office of Power Technologies, provided a welcome address, and Patricia Hoffman, Office Director for Distributed Energy Resources (DER), provided an overview of DER activities. Joe Galdo, program manager for the Distributed Power Program, summarized the past year's accomplishments and the work planned for FY 2002. Representatives from the Department of Energy, National Renewable Energy Laboratory, Oak Ridge National Laboratory, and industry detailed accomplishments over the past year and discussed plans for work during the upcoming year. Areas of focus include interconnection requirements and testing; near term applications; advanced system integration and control; and standards, codes, and regulations. One of the projects, with Distributed Utility Associates, is planning, siting, and designing a Distributed Utility Integration Test (DUIT) at the Nevada Test Site. A concept paper was completed that describes and defines a proposed major test of the electrical implications of deep and diverse penetration of distributed energy resources into distribution systems. The presentations given at the peer review are available on the DP website www.eren.doe.gov/distributedpower.

Duke Solar, Green Mountain Energy, Ohio Manufacturers Association, Plug Power/DTE Technologies, STM Power, Solar Turbines, Bekaert ECD Solar Systems LLC, Capstone Turbine, AstroPower, Inc and Stirling Technology Company.

CRO to Co-Sponsor CHP Workshop

The Chicago Regional Office (CRO) will co-sponsor a one-day "Electric Interconnection Standards Workshop" with the Midwest CHP Initiative and Midwest CHP Application Center on February 12 in Chicago, Illinois. The purpose of the workshop is to share lessons learned from ongoing state interconnection procedures development, identify common elements that may apply throughout the region, and build relationships between state policymakers involved with interconnection procedures development. Attendees will include state regulators and staff involved with constructing state grid interconnection rules for distributed generation and Midwest State Energy Offices. Joe Galdo, Program Manager for the Distributed Power Program, and Dick DeBlasio, Principal Engineer, National Renewable Energy Laboratory, will speak at the workshop. In addition, a representative from the Texas Utility Commission will present the "Texas experience."

● Announcements

Microturbines Presentations Posted

The presentations given at the Microturbine Applications Workshop on January 17-18 can be found at www.nrcan.gc.ca/es/etb/cetc/cetc01/htmldocs/ces_rbrandon_e.html.

● By the Numbers

- 962 Number of electric utilities that report having demand-side management (DSM) programs in 2000—an increase of 114 utilities from 1999
- 516 Number of those utilities considered to be large
- 446 Number of those utilities classified as small
- DSM costs increased to 1.6 billion dollars from 1.4 billion dollars in 1999.

www.eia.doe.gov/cneaf/electricity/dsm00/dsm_sum.html

● What's on the Web

The Federal Energy Management Program has posted "Deployment of Distributed Energy Resources: Sources of Financial Assistance and Information" on its web site at [www.eren.doe.gov/femp/techassist/pdf/der_\\$available_1_24_02.pdf](http://www.eren.doe.gov/femp/techassist/pdf/der_$available_1_24_02.pdf). The document reviews various sources of assistance from the U.S. Department of Energy, State governments, and other organizations.



Calendar of Events

FEBRUARY 2002			
11-13	NASEO 2002 Energy Outlook	Washington, DC	www.naseo.org/events/default.htm
11-15	CERAWeek 2002	Houston, TX	www.cera.com/ceraweek
14	FERC-DOE Demand Response Conf.	Washington, DC	www.ferc.gov/electric/rto/mrkt-strct-comments/rm01-12-comments.htm#demand ; Lauren Giles, lgiles@energeticsinc.com
20-21	Growing Green Power Demand	Denver, CO	www.xenergy.com/denver
20-22	NET 2002: New and Emerging Technologies Conference	Tucson, AZ	www.nreca.org/edu_events/conferences/newtech/html/conference.html
21-22	Mid-Atlantic Distributed Energy Resources Workshop	Philadelphia, PA	www.eren.doe.gov/pro/cal.html ; to register: www.energetics.com/DERPhilly.html
Feb 25-March 1	Turbine Power Systems Conference and Condition Monitoring Workshop	Galveston, TX	www.netl.doe.gov
Feb 27-March 1	15th Annual IDEA College/University Conference	Denver, CO	www.districtenergy.org
Feb 27-March 1	DistribuTECH	Miami Beach, FL	www.pennwellevents.com
Feb 27-March 1	Hydrogen Storage Technology—Status and Critical Needs	Hilton Head, SC	william.summers@srs.gov
MARCH 2002			
4-8	Design of Low Emission Gas Turbine Combustors	Irvine, CA	www.uci.edu/GTESC/
7-8	Distributed Generation	South San Francisco, CA	www.aeecenter.org/seminars
11-13	6th Annual Distributed Generation & On-Site Power Conference	Atlanta, GA	www.dist-gen.com ; (508) 427-9470; gesi@mediaone.net
12	National Energy Modeling System/Annual Energy Outlook Conference	Washington, DC	www.eia.doe.gov/oiaf/aeo/conf/
13-15	Power System 2002 Conference: Impact of Distributed Generation	Clemson, SC	www.ces.clemson.edu/powsys2002/main.htm
14-15	Fundamentals of Energy Management	Las Vegas, NV	www.aeecenter.org/seminars
12-14	DOE Gas Turbine and Microturbine Programs Peer Review	Fairfax, VA	Debbie Hought (202) 586-2211
17-21	EPRI's 7th Distributed Resources Conference and Expo	Dallas, TX	www.epri.com/programHigh.asp?program=238295&objid=266151
19-21	Electric Power 2002	St. Louis, MO	www.electricpowerexpo.com
20-23	Building Energy Conference	Medford, MA	www.nesea.org ; (877) 44-SOLAR, ext. 20
22	Indiana/Caterpillar CHP Workshop	Indianapolis, IN	Ethan Rogers, (317) 232-8961

Calendar of Events

MARCH 2002			
25-26	Fundamentals of Cogeneration & On-site Generation	Philadelphia, PA	www.aeecenter.org/seminars
26-27	2nd Annual Fuel Cell Investor	New York, NY	www.srinstitute.com/cr218
27-28	GLOBALCON Energy/Facilities Management Conference & Expo	Philadelphia, PA	www.aeecenter.org/seminars
APRIL 2002			
2-3	Implementing Renewable Energy Projects	Washington, DC	Gail Norby, (303) 526-5528, gail@imaginitech.com
3-4	The 2002 Hydrogen Investment Forum	Washington, DC	www.intertechusa.com
8-9	Colorado Wind and Distributed Energy: Renewables for Rural Prosperity	Denver, CO	www.state.co.us/oemc
8-9	Fuel Cells and Distributed Power Conference	Stamford, CT	www.bccresearch.com/fuel_cells
15-17	EESAT 2002, Electric Energy Storage—Applications and Technologies	San Francisco, CA	www.sandia.gov/EESAT ; Dr. Imre Gyuk (202) 586-1482
21-23	4th Annual Small Fuel Cells Conference	Washington, DC	custserv@knowledgefoundation.com
30-May2	Houston Energy Expo	Houston, TX	www.nesamet.org
MAY 2002			
1-3	External Combustion Engines—New Strategies for Efficient, Green Power Generation	Los Angeles, CA	chuck@intertechusa.com
JUNE 2002			
2-5	Energy 2002 Workshop and Expo: Hot Challenges, Cool Solutions	Palm Springs, CA	(703) 243-8343, www.energy2002.ee.doe.gov
6-7	West Coast Energy Management Congress	Anaheim, CA	(703) 243-8343, www.aeecenter.org
16-18	National Accounts Conference and Exhibition (American Gas Association)	Nashville, TN	TheGasChoice.com
JULY 2002			
	No events submitted for this month.		
AUGUST 2002			
18-23	Summer Study on Energy Efficiency in Buildings	Pacific Grove, CA	www.aceee.org